



U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 2

December 04, 2018

BY ELECTRONIC MAIL

Robert Law, Ph.D.
de maximis, inc.
186 Center Street, Suite 290
Clinton, New Jersey 08809

Re: Re: Lower Passaic River Study Area Draft Feasibility Study Work Plan

Dear Dr. Law:

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The U.S. Environmental Protection Agency (EPA) has reviewed *draft Feasibility Study (FS) Work Plan Interim Remedy (IR) Addendum*, prepared by Integral Consulting on behalf of the Cooperating Parties Group (CPG) for the Lower Passaic River Study Area Remedial Investigation (RI)/FS. The *draft FS Work Plan IR Addendum* was received from the CPG on November 12, 2018.

Please proceed with revisions to the draft FS Work Plan within 30 calendar days consistent with the enclosed comment evaluations. If there are any questions or clarifications needed on EPA's enclosed comment evaluations, please contact me to discuss.

Sincerely,

A handwritten signature in black ink, appearing to read "Diane Salkie".

Diane Salkie, Remedial Project Manager
Lower Passaic River Study Area RI/FS
Enclosure

Cc: Zizila, F. (EPA)
Sivak, M. (EPA)
Hyatt, B. (CPG)
Potter, W. (CPG)
Nickerson, J. (NJDEP)
Hayton, A. (NJDEP)

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No.	Section	General or Specific	Page No.	EPA Comment
1	Section 1, first paragraph	Specific	1-1	Add a sentence to the end of this first paragraph that defines the LPRSA as the 17.4 miles of the Passaic River from Dundee Dam to Newark Bay; this sentence is important as the basis for descriptive language in the second paragraph of Section 1 and later in the document.
2	Section 1, second paragraph	Specific	1-1	Amend the first sentence in this paragraph to read [bold and italicized language indicates requested changes]: “..., directing the CPG to perform a feasibility study (FS) <i>evaluating alternatives</i> for a source control interim remedy (IR) in the upper 9 miles of the LPRSA.” In the fourth sentence of this paragraph, specify that the series of technical memoranda were “FS-related technical memoranda”, to avoid any confusion about the nature of the memoranda. Amend the second to last sentence in this paragraph to read [bold and italicized language indicates requested changes]: “In 2016, EPA provided comments on the technical memoranda; <i>because the primary focus of the LPRSA RI/FS at that time was placed on the RI, the technical memoranda were not finalized, and a full review of the 2015 draft FS was not completed.</i> ”
3	Section 1.1, second paragraph	Specific	1-1	In the second sentence of this paragraph, define the meaning of “surficial”, particularly since the RM 10.9 removal action addressed sediments in the top 2 feet of the sediment bed and there is a specific meaning for surface sediments that would be addressed under an IR for the upper 9 miles of the river. Also, in this sentence, specify that in-place capping was performed for remaining “contaminated sediment” (not simply remaining sediment) to reduce the potential for exposure and migration.
4	Section 1.1, third paragraph	Specific	1-2	In the second sentence, replace the word “elevated” with “highly” to avoid confusion between a physical elevation and the extent of contamination.
5	Section 1.1, fourth paragraph	Specific	1-2	In the third sentence, and globally throughout the document, ensure the lower 8.3-mile reach is consistently defined as the lower 8.3 miles (as opposed to the lower 8 miles, unless explicitly describing RM 0 to RM 8).
6	Section 1.2	Specific	1-2	Change the title of this section to “Rationale for Evaluating Alternatives for an Upper 9-Mile Interim Remedy”
7	Section 1.2, first paragraph	Specific	1-2	In the first sentence of this paragraph, change “basis for an IR focused on source control” to “basis for evaluating a potential IR focused on source control”, and change “transport behavior” to “sediment and contaminant fate and transport behavior”. Amend the second sentence to read [bold and italicized language indicates requested changes]: “In summary, the data and evaluations indicate that there are discrete areas of sediments with contaminant concentrations sufficiently elevated to be net sources to the water column, <i>biota</i> , and the remainder of the sediment bed”.
8	Section 1.2, second paragraph	Specific	1-3	In the first sentence, add “sediment and contaminant transport within and out of the upper 9-mile reach” as a mechanism that influences observed contaminant concentrations.
9	Section 1.2, second paragraph	Specific	1-3	Figure 2 is referenced in the third sentence of this paragraph, but this figure does not support the narrative where it is referenced. Figure 2 shows the distribution of 2,3,7,8-TCDD concentrations relative to RM and grain size, but does not demonstrate deposition or erosion, per se. Figure 2 should be referenced according to what it does demonstrate.
10	Section 1.2, second and third paragraphs	General	1-3	Overall, these paragraphs are highly simplified, and the reader should be explicitly referred to the document(s) where additional detail exists to better explain the summarized characteristics.
11	Sections 1.2.1 and 1.2.2	General	1-3 to 1-4	Delete these sections, as they contain conclusions and analysis that are not consistent with information presented in other LPRSA documents, including those related to OU2. Moreover, the information in these sections is not critical to the FS Work Plan IR Addendum, and can be more accurately reflected in the IR FS. The existing Section 1.2.3 language can be integrated into Section 1.2, and figures referenced in Sections 1.2.1 and 1.2.2 could be appropriate to support other remaining information in the Addendum.
12	Section 1.2.3, first and second paragraphs	Specific	1-4	These paragraphs express conclusions with supposition and unsupported qualifiers and should be reworded. Amend the first paragraph to read [bold and italicized language indicates requested changes]: “...are likely to be reflective of recent deposition and likely to have good <i>increased</i> recovery potential if the concentrations on depositing particles are significantly reduced.” In the first sentence of the second paragraph delete “significantly”. Also, amend the last sentence of the second paragraph to read [bold and italicized language indicates requested changes]: “Therefore, an IR for the upper 9 miles that removes sources (and potential sources) of 2,3,7,8-TCDD and total PCBs (and all other co-located contaminants of potential concern) will <i>would be expected</i> to accelerate recovery, reduce exposure, reduce surface-weighted area concentrations (SWACs), and limit the potential for transport to less contaminated areas...”
13	Section 1.3	Specific	1-5	For consistency with the remainder of the document, the heading of this section should be “Objectives and Scope of the Interim Remedy Feasibility Study”

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14	Section 1.3, first paragraph	Specific	1-5	<p>The first sentence in this paragraph implies that the interim remedy is intended to control ongoing sources, but this could be interpreted to mean ongoing inputs of contamination to the system from ongoing chemical discharges. Other portions of this section also should be revised for clarity and accuracy. Reword this section to read [bold and italicized language indicates requested changes]: “The IR FS will identify and evaluate a set of remedial alternatives to control ongoing address <i>sediment</i> sources in the upper 9 miles of the LPRSA. The FS will include a detailed and comparative analyses of the alternatives and provide the basis for the selection of a the source control IR. <i>It is anticipated that a</i>After the IR FS is finalized, EPA will issue a proposed plan for public review and comment. The proposed plan will summarize the results of the IR FS and describe the basis for EPA’s identification selection of a preferred alternative. After comments on the proposed plan have been evaluated and addressed, <i>it is anticipated that</i> EPA will issue an interim ROD that documents the selected action and the basis for its selection. The interim ROD will document the selected source control IR.</p> <p>Long-term performance <i>Mitigating all site-related risks</i>, including establishment of numerical remediation goals, will be evaluated and documented in a subsequent, final ROD for the LPRSA.”</p>
15	Section 1.4	Specific	1-5	<p>The second bullet should explicitly state “the IR FS reporting and schedule”.</p>
16	Section 2	General	2-1 to 2-5	<p>This section should also include the requirement under §300.430(a)(1)(ii)(B), which states, “Operable units, including interim action operable units, should not be inconsistent with nor preclude implementation of the expected final remedy.”</p>
17	Section 2	Specific	2-1	<p>This section describes what the IR FS will contain. Section 1 provides the basis for the IR, including the anticipated outcome and benefits. The first sentence in this section should be rewritten to read [bold and italicized language indicates requested changes]: “The IR FS will develop and evaluate a set of remedial alternatives to reduce address sediment <i>areass-of-contamination and accelerate recovery and risk reduction</i> in the upper 9 miles of the LPR.”</p> <p>Also, add language that indicates that the IR FS activities will be supported by FS-related meetings intended to discuss and finalize important IR FS elements, and reference Section 3.2 where these meetings are summarized.</p>
18	Section 2.1	Specific	2-1	<p>Revise this section to read [bold and italicized language indicates requested changes]: “Remedial actions objectives (RAOs) for the IR FS will be focused on successful completion of the source control remedial action, specifically. <i>Once the RAOs have been achieved, outcomes of this action will include</i> removal of source materials to reduce exposure, limit contaminant transport potential, and accelerate recovery of the remaining sediments and the water column. The RAOs provide a basis for evaluation of the remedial alternatives and for development of performance metrics for a the remedial action”.</p> <p>It is important to not link removal of source materials to reduce exposure, limit contaminant transport potential, and accelerate recovery of remaining sediments and the water column to the RAOs, because then performance metrics would be required to demonstrate that each RAO has been achieved. As currently written, the RAOs include controlling sources by remediating sediments and reducing concentrations (RAO 1) and controlling subsurface sources by remediating sediments with a potential for erosion above a concentration (RAO 2). The performance metrics are concentration-based, so these metrics to demonstrate attainment are directly related to the objectives. The metrics are not related to the other outcomes, such as reducing exposure, limiting transport potential, and accelerating recovery.</p>
19	Section 2.2	Specific	2-1	<p>Specifically indicate that the March 25, 2015 RAO/PRG memo was a draft.</p>
20	Section 2.3	Specific	2-1	<p>Amend the third sentence to specify the “upper 9-mile interim remedy”.</p>
21	Section 2.6	Specific	2-2	<p>Given the relative importance with respect to construction season and schedule, the impact of restricted construction windows (i.e., “fish windows”) should be acknowledged; in the second sentence of this section, replace “construction season and schedule” with “construction season and schedule (including consideration of “fish windows”)”. This section should also acknowledge the efforts to leverage the infrastructure and schedule for the lower 8.3 mile remedy.</p>
22	Section 2.7	Specific	2-2	<p>The IR FS evaluation metrics are described in a way that is very similar to the balancing criteria: “Evaluation metrics will be developed for use in the IR FS to evaluate the extent to which each remedial alternative is expected to achieve source control and meet the RAOs for the interim remedy.”</p> <p>Clarify if this section is intended to focus on the five balancing criteria, or if this refers to some other criteria. If this refers to the five balancing criteria, clarify what is meant by “[e]valuation metrics will be developed...” since these are already established.</p>
23	Section 2.9.1	Specific	2-3	<p>In number 2 after the first paragraph, “Compliance with ARARs” is described in a general sense relative to CERCLA evaluation procedures. Given this is a general description, replace “IR” with “alternative”. In the final paragraph, replace “this FS” with “the IR FS”. Also, the final paragraph implies that evaluation of the threshold criteria will be deferred until the final OU4 ROD, when in fact the IR alternatives will need to be assessed relative to the threshold criteria to satisfy CERCLA requirements and allow an IR to be selected. This paragraph should be revised to indicate that the IR alternatives will be assessed in the IR FS relative to the threshold criteria, while recognizing that a final, risk-based ROD will be developed for the LPRSA.</p>
24	Section 2.9.3	Specific	2-4	<p>In the second sentence of the first paragraph, replace “FS” with “IR FS”.</p>

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25	Section 2.10	Specific	2-5	An introductory sentence/paragraph is needed that indicates what the adaptive management program is intended to do, why it is needed, and when it is anticipated to occur. As currently written, this section describes a concept that is not first introduced in any way.
26	Section 3.1	Specific	3-2	In the bullet for Section 9, change “...the IR for the LPRSA” to “...an IR for the LPRSA”.
27	Section 3.2	General	3-2	Update this section to reflect the current schedule and progress made on the issues.
28	Section 3.2	Specific	3-3	Delete the bullet summarizing three Administrator briefings; this detail is not useful in Section 3.2.
29	Figure 2	Specific	N/A	The text box describing “mostly fine”, “coarser”, and “very coarse” sediments is unclear in both content and intent, does not appear to add value to the figure, and represents a substantive change from the corresponding figure in the LPRSA RI Report; this text box should be removed (if of some descriptive value, this information could be incorporated somehow into the text of the document).
30	Figure 4	Specific	N/A	The quote from the FFS RI Report is unclear in intent, does not appear to add value to the figure, and represents a substantive change from the corresponding figure in the FFS RI Report; this quote should be removed (if of some descriptive value, this information could be incorporated somehow into the text of the document).

N/A – Not applicable